

Cognition and Decision making (096617)  
A EuroTeQ course, Spring 2023

Class: Tue 16:30-17:20, Jerusalem time  
Tutorial: Tue 18:30-19:20, Jerusalem time

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Office hours by email appointment  
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### **Syllabus**

The course reviews basic research in behavioral economics, and examines how this research can be used to predict the impact of new technologies. It starts by considering three lines of studies of human decision making. The first focuses on rational economic theory. The second focuses on experiments designed to clarify the way human behavior deviates from the prediction of rational economics theory in simple choice task. The third line focuses on the way people learn from experience, and extends the analysis to environments in which rational economic theory cannot be used to derive clear predictions. The second part of the course examines the practical implications of the research reviewed in the first part. It considers the impact of nudges and behavioral mechanism design.

### **Grading**

The final grade will be determined by four factors:

50% Final multiple-choice (in class) exam that focuses on predicting choice behavior.

50% Choice prediction competition.

+

15% Bonus for class participation (answering question using google form during the classes).

Date	Topic	Reading
21.3	The impact of money, and the rationality assumption	Hardin (1967)
28.3	St Petersburg paradox and Expected utility theory	Johnson & Goldstein (2003).
4.4	Decisions under risk	Kahneman & Tversky (1979)
11.4	No Class (Passover)	
18.4	Probability judgment	Tversky & Kahneman & (1974)
25.4	No Class (Israel's Memorial Day)	
2.5	No Class (Technion's entrepreneurial day)	
9.5	The description-experience gap	Hertwig & Erev (2009) Erev et al. (2017)
16.5	Six contradictory deviations	Erev et al. (2023)
23.5	Time discounting	DellaVigna (2009) until the end of Section 2.1.9
30.5	Nudges	Sunstein (2014).
6.6	The long-term effect of nudges	Beshears & Kosowsky (2020)
13.6	Rule enforcement	Teodorescu et al. (2021)
20.6	Fake news	Lazer et al. (2018)
27.6	Populism	Obradović et al., (2020)
4.7	Student presentations and summary	

## Reading list

- Beshears, J., & Kosowsky, H. (2020). Nudging: Progress to date and future directions. *Organizational behavior and human decision processes*, 161, 3-19.
- DellaVigna, S. (2009). Psychology and economics: Evidence from the field. *Journal of Economic literature*, 47(2), 315-72.
- Erev, I., Ert, E., Plonsky, O., Cohen, D., & Cohen, O. (2017). From anomalies to forecasts: Toward a descriptive model of decisions under risk, under ambiguity, and from experience. *Psychological review*, 124(4), 369.
- Erev, I., Ert, E., Plonsky, O., & Roth, Y. (2023). Contradictory deviations from maximization: Environment-specific biases, or reflections of basic properties of human learning? *Psychological Review*, forthcoming.
- Hardin, G. (1968). The tragedy of the commons: the population problem has no technical solution; it requires a fundamental extension in morality. *science*, 162(3859), 1243-1248.
- Hertwig, R., & Erev, I. (2009). The description–experience gap in risky choice. *Trends in cognitive sciences*, 13(12), 517-523.
- Johnson, E. J., & Goldstein, D. (2003). Do defaults save lives?. *Science*, 302(5649), 1338-1339.
- Kahneman, D. (2003). Maps of Bounded Rationality: Psychology for Behavioral Economics. *The American Economic Review*, 93, 1449-1475.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47, 263-291.
- Lazer, D. M., Baum, M. A., Benkler, Y., Berinsky, A. J., Greenhill, K. M., Menczer, F., ... & Zittrain, J. L. (2018). The science of fake news. *Science*, 359(6380), 1094-1096.
- Milkman, K. L., Gromet, D., Ho, H., Kay, J. S., Lee, T. W., Pandiloski, P., ... & Duckworth, A. L. (2021). Megastudies improve the impact of applied behavioural science. *Nature*, 600(7889), 478-483.
- Obradović, S., Power, S. A., & Sheehy-Skeffington, J. (2020). Understanding the psychological appeal of populism. *Current Opinion in Psychology*, 35, 125-131.
- Sunstein, C. R. (2014). Nudging: a very short guide. *Journal of Consumer Policy*, 37(4), 583-588.
- Tversky A. & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185, 1124-1131.  
<https://www4.stat.ncsu.edu/~wilson/bayes/TverskyKahneman74.pdf>
- Watts, T. W., Duncan, G. J., & Quan, H. (2018). Revisiting the marshmallow test: A conceptual replication investigating links between early delay of gratification and later outcomes. *Psychological science*, 29(7), 1159-1177.